

What is claim is:

1. Particles for drug delivery by inhalation, comprising at least one active ingredient which is non-crystalline.
2. Particles according to Claim 1, further comprising a second or more active(s) and/or one or more excipients.
3. Particles for drug delivery according to Claim 1 or Claim 2, the particles containing a plurality of non-crystalline active ingredients.
4. Particles according to Claim 3, further comprising an outer surface of the particles being substantially smooth.
5. Particles according to Claim 3, particles being substantially spherical.
6. Particles according to Claim 5, particles being oblate spheroidal.
7. Particles according to Claim 3, particles being substantially oval.
8. Particles according to Claim 3, particles being substantially elliptical.
9. Particles according to any preceding claim, having a particle size in the range 0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ .
10. Particles according to Claim 9, the particle size being between 1  $\mu\text{m}$  to 3  $\mu\text{m}$ .
11. Particles according to Claim 9 when dependent on Claim 7 or Claim 8, the longer axis of an oval or elliptical particle having a length between 1  $\mu\text{m}$  to 3  $\mu\text{m}$ .
12. Particles according to any preceding Claim, the particles being electrically uncharged.
13. Particles according to any preceding claim, provided by a method selected from the group comprising rapid expansion of supercritical solutions, precipitation from gas saturated solutions, gas anti-solvent systems, aerosol solvent extraction systems and spray drying processes.
14. Particles according to any preceding claim, there being from two to four active ingredients.

15. Particles according to any preceding claim, comprising a pharmaceutically acceptable particular excipient or excipients.
16. Particles according to any preceding claim, the active ingredients comprising a  $\beta_2$ -agonist and a steroid.
17. Particles according to Claim 15, comprising fluticasone-dipropionate and salmeterol xinafoate.
18. Particles according to any one of Claims 1 to 15, comprising formoterol and budesonide.
19. Particles for drug delivery according to any of claims 2 to 18, the or each excipient being soluble in conditions obtaining in the nose, lung(s) or mouth of a human or animal.
20. An inhalation composition, comprising particles which incorporate at least one active ingredient which is non-crystalline.
21. A composition according to Claim 20, further comprising a second or more active(s) and/or one or more excipients.
22. A composition according to Claim 20 or 21, the particles containing a plurality of active ingredients, which active ingredients are non-crystalline.
23. A composition according to Claims 20 to 22, there being from two to four active ingredients.
24. A composition according to any of Claims 21 to 23, the particles comprising a pharmaceutically acceptable excipient within the particle.
25. A composition according to any of Claims 21 to 24, the particles comprising a pharmaceutically acceptable excipient or excipients where a main excipient is in a greater proportion than the active or actives.
26. A composition according to Claim 25, the main excipient being Mannitol or PVP.
27. A composition according to any of Claims 21 to 26, comprising one or more additional carrier excipient(s).

28. A composition according to Claim 27, said excipient(s) comprising a modifier or stabiliser.
29. A composition according to Claim 27, said excipient(s) comprising a chemical buffer, antioxidant and the like.
30. A composition according to Claim 27, said excipient(s) comprising a surface modifier or surfactant.
31. A composition according to any of Claims 20 to 30, the outer surface of the particles being substantially smooth.
32. A composition according to Claim 31, the particles being substantially spherical.
33. A composition according to Claim 32, the particles being oblate spheroidal.
34. A composition according to Claim 31, the particles being substantially oval.
35. A composition according to Claim 31, the particles being substantially elliptical.
36. A composition according to any of Claims 20 to 35, the particles thereof having a particle size in the range  $0.5\mu\text{m}$  -  $5\mu\text{m}$ .
37. A composition according to Claim 36, having a particle size of  $1\mu$  to  $3\mu$ .
38. A composition according to Claim 37, the particles being electrically uncharged.
39. A composition according to any of Claims 20 to 38, provided by a method selected from the group comprising rapid expansion of supercritical solutions, precipitation from gas saturated solutions, gas anti-solvent systems, aerosol solvent extraction systems, and a spray drying process.
40. A composition according to any of claims 20 to 39, comprising fluticasone and salmeterol xinafoate as active ingredients.
41. A composition according to any of Claims 20 to 39, the particles comprising formoterol and budesonide as active ingredients.
42. A composition according to any of Claims 29 to 39, the particles containing one or more cannabinoids as an active ingredient.
43. A composition according to claim 42, the cannabinoid comprising delta-8 or delta-9 tetrahydrocannabinol.

44. An inhaler device, comprising an inhalation composition according to any of Claims 20 to 43.
45. A pulmonary nasal inhalation device, comprising an inhalation composition according to any of Claims 20 to 44.
46. A device according to Claim 44 or Claim 45, the main excipient being non-soluble in the propellant or propellants.